

**Silviu Bârză**, *Some Considerations About Component  $p$ -vertexes Complete Subgraph*

**Abstract**

In previous studies I approached component minimal complete subgraph for a given graph  $G$ . One can consider that the proper definition for component minimal subgraph is component 3-vertexes complete subgraph and so I consider that is natural to generalize it to component  $p$ -vertexes complete subgraph for any  $p \geq 3$ . To do this, in this paper I will introduce the general definition and some important results which will allow me in the future to build an algorithm for the determination of component  $p$ -vertexes complete subgraph for a given graph  $G$

**Keywords:** *subgraphs, complete graphs*

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